

## IN THE CLAIMS

1-6. (*Canceled*)

7. (*Currently Amended*) A process for forming an electrical connection to a semiconductor device comprising:

forming a first metal-containing layer, wherein the first metal containing layer:

5                    **consists substantially of a metal having a melting point of less than approximately seven hundred (700) Celsius;**

contacts an exposed region that includes silicon carbide; and

has a composition that does not form an ohmic contact with a doped silicon carbide if annealed for a time period of less than ten hours and at a  
10    temperature less than a melting point of ~~a material~~ **the metal** within the metal-containing layer; and

annealing the metal-containing layer and the exposed region at a temperature less than the melting point of the **metal within the** metal-containing layer and for a period of time in excess of ten hours, wherein a substantially  
15    continuous ohmic contact region is formed between the first metal-containing layer and the silicon carbide.

8. (*Currently Amended*) The process of claim 7, wherein the **material**  
**metal within the metal containing layer** is aluminum.

9. (*Original*) The process of claim 7, wherein annealing is performed for a  
time period of at least twenty hours at a temperature in a range of approximately  
400-660 C

10. (*Original*) The process of claim 7, wherein the composition is  
substantially pure aluminum.

11. (*Previously Amended*) The process of claim 7, wherein: the material  
is aluminum; and the composition comprises aluminum and a first dopant,  
wherein the composition is at least approximately 90 weight percent aluminum.

12. (*Original*) The process of claim 7, wherein annealing is performed for  
a time period of at least approximately 25 hours.

13. (*Original*) The process of claim 7, wherein annealing is performed at  
a temperature no greater than approximately 660 degrees.

14. (*Original*) The process of claim 7, wherein annealing forms an aluminum silicon carbide alloy.
15. (*Original*) The process of claim 7, wherein the exposed region is ptype doped.
16. (*Original*) The process of claim 7, wherein annealing is performed in a vacuum.
17. (*Original*) The process of claim 7, wherein annealing is performed using a noble gas.
18. (*Original*) The process of claim 7, further comprising:  
removing a portion of the first metal containing layer; and  
forming second metal containing layer over the contact region.
19. (*Currently Amended*) A process for forming an electrical connection to a semiconductor device comprising:  
forming a metal-containing layer **consisting substantially of a metal having a melting point of less than approximately seven hundred (700)**

- 5 **Celsius** that contacts an exposed region, wherein the exposed region includes silicon carbide; and

annealing the metal-containing layer and substrate for a time period of at least approximately ten hours and at a temperature of at least approximately 300 C.

20. (*Original*) The process of claim 19, wherein the metal-containing layer is substantially pure aluminum.

21. (*Original*) The process of claim 19, wherein the metal-containing layer comprises at least approximately 90 weight percent aluminum.

22. (*Original*) The process of claim 19, wherein annealing is performed for a time period of at least approximately 25 hours.

23. (*Original*) The process of claim 19, wherein annealing is performed at a temperature no greater than approximately 660 degrees.

24. (*Original*) The process of claim 19, wherein annealing forms an aluminum silicon carbide alloy.

25. (*Original*) The process of claim 19, wherein the exposed region is ptype doped.
26. (*Original*) The process of claim 19, wherein annealing is performed in a vacuum.
27. (*Original*) The process of claim 19, wherein annealing is performed using a noble gas.
28. (*Original*) The process of claim 19, wherein annealing forms an ohmic contact between the metal-containing layer and the exposed region.